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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JAN 0 7 2004

In re: Application of:

Group Art Unit: 2814

OFFICI,

Nace Layadi, et al.

Examiner: Mai, Anh D.

Serial No.: 09/905,398

Filed:

7/14/2001

Title:

POLISH OR ETCH STOP LAYER

Mail Stop Non-fee Amendment Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

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Reply under 37 CFR 1.111 (3 pages)

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Date

2004

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REPLY UNDER 37 CFR 1.111

This paper is in response to the official Office Communication dated 10/28/2003.

REMARKS

Claims 1-5, 7 and 19-21 are pending in this application. Claims 19 and 20 stand rejected under 35 USC 102(e) as anticipated by, or in the alternative under 35 USC 103(a) as obvious over, Brennan (U.S. patent number 6,211.072). Claims 1-5, 7 and 21 stand rejected under 35 USC 103(a) as unpatentable over Yamashita in view of Meikle.

The applicants appreciate the withdrawal of the 102(b) rejection of claims 19 and 20 in view of Konecni.

With regard to the new rejection of claims 19 and 20 in view of Brennan, the applicants note that independent claim 19 includes the limitations of "a polish stop layer comprising titanium nitride alloyed with carbon deposited over the dielectric layer ... wherein the polish stop layer has a hardness which is 30 to 35 percent greater than a hardness of titanium nitride alone for protecting the dielectric layer from a chemical mechanical polishing process used to remove a portion of the metal layer deposited outside of the via." Brennan describes layer 28 as an adhesion layer, not a polish stop